What is “the flu”?
The flu is a type of germ (called a virus) that you breathe in. It can get into the nose, throat, and lungs. Flu is also called influenza (in-floo-EN-zuh). The flu illness is caused by influenza viruses. There are many different strains (types) of this virus. All strains are named starting with an A or B type (such as Influenza A H1N1 or Influenza A H3N2). This season there are vaccines available that include four strains of flu virus (quadrivalent) as well as vaccines that include only three strains (trivalent). The strains that are included are the ones likely to appear this season and will give you protection. Flu viruses are constantly changing, so it is not unusual for new flu strains to appear and result in the flu even though you may have gotten the vaccine. Despite this, it is important to get a new flu vaccine every year.

How do I know if I have the flu?
The flu usually starts suddenly and may include the following symptoms:
- fever (usually high)
- chills
- muscle aches
- weakness
- sore throat
- runny or stuffy nose
- headache
- red or itchy eyes
- dry cough
- tiredness (can be extreme)
- diarrhea (especially children)

What is the flu vaccine?
The flu vaccine can protect you against some types of flu virus. These vaccines are usually available by September and are usually are given until at least March or April, when the typical flu season ends. It takes about 2 weeks after vaccination for antibodies to form that can help protect you. There are three ways you can get the flu vaccine this season:
- The flu “shot” is usually given in the muscle of the arm. It is given to children 6 months and older and adults. It cannot make you sick with the flu.
- There is a high-dose flu vaccine designed for people 65 years and older that may offer better protection.
- The flu “micro-shot” is given under the skin of the arm (intra-dermal). It can be given to adults between the ages of 18 and 64 years. It cannot make you sick with the flu.
- One brand of trivalent flu vaccine can be given with a jet injector which uses a high pressure jet of fluid to penetrate the skin rather than a needle. It is approved only for people 18 to 64 years of age.

Who should receive a flu vaccine?
- All adults and children 6 months of age and older
- People who are at risk of getting a severe flu illness include:
  - People over 50 years of age (a higher strength version of the vaccine is recommended for people 65 years and older)
Pregnant women and those planning pregnancy during the flu season
- Young children
- Caregivers of infants less than 6 months
- Adults and children with the following:
  - Chronic lung disease (including emphysema, COPD, and asthma)
  - Chronic heart disease (except high blood pressure)
  - Chronic metabolic diseases (including diabetes)
  - Kidney disease
  - Hepatic (liver) disease
  - Blood disorders (including sickle cell anemia)
  - Those with weakened immune systems such as those with HIV/AIDS or those who have low immunity from chronic steroids, chemotherapy or radiation therapy
  - Children and teenagers who take daily aspirin therapy
  - Caregivers who live with or care for those at high risk for serious complications from the flu
- People who are very obese with body mass index of 40 or higher
- Most healthcare providers are required to get the flu vaccine

Note: this list only provides examples of conditions for which the flu vaccine is recommended. Your healthcare provider may want you to have a flu shot for other conditions.

What can I do to prevent the flu?
- Getting a yearly influenza (“flu”) vaccine is still the best way to protect you and your family from influenza.
- Wash your hands often and well. Use soap and water or a hand cleaner.
- Avoid being near people who are sick.
- Eat a healthy diet.
- Keep good control of medical problems, such as asthma.
- Don’t smoke and avoid being around any tobacco smoke.
- Cover your nose and mouth with a tissue when you sneeze or cough, and throw away the tissue afterward.

What if I have the flu?
- The flu can be very serious and even deadly, particularly if you have a high risk condition. Do not wait to call your health care provider if you think you may have the flu. Ask your health care provider about prescription medicines that can help your flu symptoms. These medicines have to be started soon after the flu starts in order to help.
- Treat signs of flu with medicines that relieve pain and fever such as acetaminophen (like Tylenol®) or ibuprofen (like Motrin® and Advil®). Never give a child aspirin without first speaking to your health care provider.
- Rest as much as possible.
- Drink plenty of liquids.
- Avoid touching your eyes, nose or mouth to prevent spreading germs.
- Stay home from work or school to keep from giving others the flu.
- Seek medical care immediately if you experience any of the following signs:
  - difficulty breathing or shortness of breath
  - pain/pressure in the chest or abdomen
  - sudden dizziness
  - confusion
  - severe vomiting that does not go away

Authors: Marianna Sockrider, MD, DrPH; Suzanne Lareau, RN, MS; Lynn Reinke, ARNP, PhD.
Reviewer: Hrishikesh S. Kulkarni, MD; Kevin Wilson, MD

Resources:
American Thoracic Society
National Foundation for Infectious Diseases http://www.nfid.org/
U.S. Centers for Disease Control and Prevention www.cdc.gov/flu
American Academy of Pediatrics http://www.healthychildren.org

Rx What to do…
- If you need a flu vaccine, get it as soon as possible. It is best to get by October. If you are delayed, there is still value to get it anytime during the active flu season.
- Wash your hands often and well with soap and water or an alcohol-based hand rub.
- Keep chronic diseases like asthma under control.
- Keep your body healthy with diet, exercise and don’t smoke!
- Avoid contact with anyone known to have a fever or symptoms of the flu.
- Cover your nose and mouth when you cough or sneeze.
- If you are having a fever and symptoms of the flu, ask your health care provider right away if you need to be treated with an antiviral medicine. Get immediate medical attention if you are having severe symptoms.

Healthcare Provider’s Contact Number:

This information is a public service of the American Thoracic Society. The content is for educational purposes only. It should not be used as a substitute for the medical advice of one’s health care provider.